

Information Technology – Software Development

Degree Type

Associate of Science

NHTI's Information Technology – Software Development degree program prepares you to obtain and succeed in well-paying jobs in one of the fastest growing fields in the world. You'll complete hands-on training in the design and development of software applications for web, mobile, and desktop environments. NHTI's IT department offers a sequence of stackable certificates in software development and related technologies; each enables you to develop marketable skills and earn industry-recognized certifications in as few as four courses while building credits toward the associate degree.

Do you have questions? Contact Aaron Conn, department chair, at aconn@ccsnh.edu or 603-271-6484 x4143.

Career Information

Graduates can enter into the following professions (not an inclusive list):

- IT help desk technician
- Entry-level software developer
- Junior-level software developer

The program also prepares students for the CompTIA A+ certification and the Microsoft Technology Associate certification exams.

Curriculum

First Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL120MC	Communication: Mindful	3	0	3
IST103C	Programming with Raspberry Pi	2	2	3
IST104C	PC/Mobile Hardware and Networking	2	2	3
IST106C	IT Career Topics	1	0	1
	PSYC 105C or SOCI 105C	3	0	3
	Subtotal Credits	11	4	13

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL101MC	English Composition: Mindful	4	0	4
IST110C	Programming Fundamentals	2	2	3
IST140C	Database Design and Management	2	2	3
IST180C	Cloud Services and Windows Server	2	2	3
MATH124C	College Algebra	4	0	4
	Subtotal Credits	14	6	17

Second Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL102MC	Introduction to Literature: Mindful	3	0	3
IST210C	Object-Oriented Programming	2	2	3
IST216C	Introduction to Web Programming	2	2	3
IST218C	Mobile Application Development	2	2	3
IST290C	IT Career Development	1	2	2
MATH125C	Finite Mathematics	4	0	4
Subtotal Credits		14	8	18

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
IST215C	Advanced Windows Programming	2	2	3
IST240C	Advanced Web Programming	2	2	3
IST294C	Senior IT Internship	0	8	2
	Software: Science elective			4
Subtotal Credits		4	12	12
Total Credits				60

Additional Information

Students are required to complete a senior internship in the area of their concentration and career goals. The internship provides real-life experience applying skills learned in the classroom. Employers work closely with the students and professors to ensure an environment that enhances their education, provides experience, and introduces them to the IT business environment.

Mindful Communications Options

Mindfulness and communication training creates opportunities for growth and leadership, flexibility, adaptability, and the confidence to handle challenges. At NHTI, learning about emotional intelligence, patience, and nonverbal communication cues are key parts of the IT curriculum. Employers expect new engineers and IT professionals to be good communicators and collaborators to help them be more effective on teams and in project work.

Program Learning Outcomes

Graduates are able to:

- Demonstrate sophisticated applications of computer technology to be competent on a professional level.
- Demonstrate interpersonal skills needed to obtain and sustain a career in information technology.
- Identify and resolve technical problems using research techniques and troubleshooting .
- Design, develop, and debug a software application.
- Configure devices, applications, and services to deploy and run software applications.
- Perform software development activities using industry-standard methodologies on different platforms.
- Design data management solutions for use by software applications.